REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1909.

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RAPPORT DE L'OFFICIER DE LA SANTE PUBLIQUE.

Letter from the President of the Board.

States Office, Guernsey, April 18th, 1910.

Sir,

I have the honour to present the Eleventh Annual Report of the Medical Officer of Health for the year 1909.

This report was approved by the Board of Health at its meeting held on the 8th inst., when it was resolved that, with your permission, it should be printed as an Appendix to the "Billet d'État," and that a certain number of copies (say 100) be struck off for distribution in the usual way.

I am, Sir, &c., &c.,

JOHN N. BROUARD,
President, Board of Health.

William Carey, Esq., Bailiff,
and President of the States of Guernsey.

REPORT FOR 1909.

The amount of sunshine recorded during 1909 was 1,968 hours. Average amount of sunshine recorded for past 16 years—1,917 hours. Rainfall—32 inches. Average, 36·2 inches.

POPULATION.

The estimated population at the middle of the year 1909 was 44,145, and the increase of Births over Deaths, 492.

The Constables and Douzaines of the various parishes in December approached the States with a view to altering the conditions under which aliens are allowed to live on the island. I am heartily in sympathy with this suggestion, and in my last two annual reports have urged the necessity of it.

I consider that the only effectual way to reject the undesirable, morally and physically, and to compel registration, would be to examine aliens before they were allowed to leave the vessels or piers.

It is not generally known that the Aliens Act in England applies also to aliens coming from the Channel Islands, probably on account of the ease with which aliens are allowed to land here.

Under the Aliens Act an immigrant is considered undesirable:—

(*a*) If he cannot show that he has in his possession, or is in a position to obtain the means of decently supporting himself and his dependents, if any. (This is held to mean a sum of £5 for himself, and £2 for each dependent.)

(*b*) If he is a lunatic or idiot, or owing to any disease or infirmity appears likely to become a charge upon the rates, or otherwise a detriment to the public.

(*c*) If he has been sentenced in a foreign country with which there is an extradition treaty for a crime not being an offence of a political character, which is as regards that country, an extradition crime within the meaning of the Extradition Act, 1870.

(*d*) If an expulsion order under this Act has previously been made in his case.

I understand that French police officials have expressed their amazement at our complacent reception of their well-known criminals, but it is with bodily rather than moral conditions that the Board of Health are chiefly concerned.

Diseases imported into the Island must be waterborne, and the Pilot Ordinance which throws the onus of making enquiries as to the health of the crew and passengers, upon pilots is sometimes an ineffectual measure of safety.

I have several times received notice from Jersey that on account of the prevalence of Small Pox in France, all vessels coming from there are medically inspected, yet nothing has been done here.

We have spent valuable time in corresponding with the French authorities, and have usually received replies that the situation has been exaggerated, not that there was no ground for such suspicion.

In my opinion we have escaped disasters in the past by good fortune more than by good management, and I consider that a more efficient system of medical inspection of vessels and immigrants is at times greatly needed in the public interests.

Table I. (Incorp. Soc. of M. O. H., 1900 (for Whole District).

YEAR.	Population estimated to middle of each year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES.	
		Number.	Rate per 1,000.	Number.	Rate per 1,000 registered.	Number.	Rate per 1,000.
Column ...	1	2	3	4	5	6	7
1899.........	39,072	1,121	28·69	151	134·7	666	17·04
1900.........	39,703	1,011	25·46	145	143·4	624	15·72
1901.........	40,300	1,096	27·20	190	171·3	699	17·34
1902.........	40,550	1 128	27·80	161	142·7	657	16·20
1903.........	41,050	1,120	27·28	112	100·0	597	14·54
1904..	41,710	1,144	27·42	181	158·2	690	16·54
1905.........	42,220	1,129	27·10	155	135·0	644	15·20
1906.........	42,730	1,112	26·00	154	138·4	588	13·70
1907.........	43,150	1,068	24·75	123	115·1	606	13·83
1908.........	43,730	1,005	23·00	131	131·0	591	13·30
Averages for ten years, 1899-1908.	41,421	1,093	25·57	150	136·9	636	15·34
1909.........	44,145	1 013	22·94	111	109·6	521	11·62

BIRTHS.

The number of Births was 1,013 (537 males, 476 females), being 8 more than the preceding year, but allowing for the increase of population the rate is 22·94 per 1,000, again the lowest recorded.

During the years 1890-1899 the average population was 36,441, rising from 35,020 to 37,905, and the average number of births was 1,123. This is equal to a birth rate of 30.8 per 1,000.

The year 1896 seems to be the year of highest birth rate, namely 36·6.

For the past ten years the average rate has been 25·57 per 1,000.

The birth rate for 1909 in England and Wales was 25·6. The same figures also apply if the 219 towns are excluded. In the 76 great towns it was 25·7, and in the 143 smaller towns it was 24·8 per 1,000.

The number of illegitimate births in Guernsey was 34, a percentage of 3·35 to the total births.

DEATHS.

The deaths registered in the year numbered 521, and the corrected death rate is 11·62.

This is not only the lowest death rate on record, but also the lowest number of deaths since 1881, in spite of the rapid increase of population.

Between the years 1881 and 1890 the death rate was 19·3, and from 1891 to 1900 it was 18 per 1,000.

In the years 1901 to 1905 it had dropped to 15·9, and from 1906 to 1909 it had further dropped to 13·1.

It was in the year 1900 that the number of deaths was first further sub-divided into age periods, so that figures subsequent to this date must be used for comparison, but they are both interesting and suggestive.

In the following table I have given the average number of deaths during the two periods, each of five years, viz.: 1900-04 and 1905-09.

YEARS 1900 TO 1904.

Under 1 year.	Between			Total 1 to 25 years.	Between 26-65.	Over 66.
	1-5	6-15	16-25			
158·6	61	25·8	32·8	278·2	180	195

YEARS 1905 TO 1909.

134·8	47·2	18·6	28·2	228·8	167·2	194

It will thus be seen that in spite of an increase in population roughly corresponding to about 500 persons per year, the saving in life that has taken place has chiefly been in the younger and working age periods, whilst the figures of old age are apparently unaffected; but as a result of the decreased number of deaths during the first period the percentage of deaths of persons over 66 years to the total was 29·8, but in the second period it had risen to 32·8.

The death rate in the Town Parish was 11·8 and for the rest of the Island, 11·3 per 1,000.

The infantile death rate was 109·6 per 1,000 births, and the table below will shew its incidence in the various parts of the Island, and the averages for the years 1904-08.

	1909.	1904-1908
Town	94	130·4
St. Sampson's	125·7	182
Vale	116	125·8
Other Parishes	116·3	114·6

This rate has only been beaten or even approached twice in the past seventeen years, namely, 1896 and 1903. In both these years the autumn months were very wet and comparatively cold, and it is under these conditions that the fatal summer and autumn diarrhœa of children is generally absent. We should therefore have expected that 1909 would have had a bad record for this disease, but fortunately it was not so, ten deaths being registered as the result of it, against an average for the past six years of 13.

July was very cold and dry; August warm and very dry; September, cold and very dry; October, mild but very wet. Fortunately the augmented water supply in September saved the situation, and St. Sampson's parish which derived most benefit from it, and which usually has an exceedingly high infantile death rate, reached the lowest figure known, but still a high one for such a district.

No deaths from Measles occurred during the year, and only two from Whooping Cough.

The following deaths took place in the Public Institutions of Guernsey :—

Castel Hospital	19
Castel Asylum	0
Town Hospital	44
Town Asylum	4
Victoria Cottage Hospital	19
King Edward Sanatorium	5

Table II.

RETURN OF BIRTHS AND DEATHS REGISTERED DURING THE YEAR 1909.

BIRTHS.

PARISH LETTER:	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*K*	T
Males	206	93	68	40	13	20	8	15	50	24	537
Females	177	82	69	38	14	21	6	23	29	17	476
Totals	383	175	137	78	27	41	14	38	79	41	1,013

DEATHS.

General Diseases and Injuries.											
Diseases of the Blood.											
Anæmia	1	–	–	–	–	–	–	–	–	–	1
Hæmophilia	1	–	–	–	–	–	–	–	–	–	1
Leucocythœmia	–	1	–	–	–	–	–	–	–	–	1
Pernicious Anæmia	1	–	–	–	–	–	–	–	1	–	2
Ricketts	2	–	–	1	–	–	–	–	–	1	4
Epidemic.											
Diphtheria	–	–	–	2	–	–	–	–	–	–	2
Enteric Fever	–	–	–	1	–	–	–	–	–	–	1
Enteritis	2	3	2	1	–	–	–	–	1	1	10
Scarlet Fever	–	–	–	2	–	–	–	–	–	–	2
Influenza	5	1	1	1	–	–	–	–	1	–	9
Whooping Cough	–	–	–	–	1	–	–	–	–	–	1
Infancy and Old Age.											
Congenital Malformation	2	–	–	1	–	–	–	–	–	–	3
Convulsions	6	–	2	1	–	1	–	–	1	–	11
Debility at Birth	2	–	–	–	4	–	–	–	1	–	7
Marasmus	9	6	7	2	1	–	–	–	1	2	28
Premature Birth	8	5	3	2	1	4	1	1	2	1	28
Senile Decay	35	9	7	6	–	1	2	3	6	1	70
Infective.											
General Tuberculosis	4	2	–	1	–	–	–	–	–	–	7
Phthisis	14	7	6	3	1	2	–	–	1	–	34
Tabes Mesenterica	–	1	–	2	–	–	–	–	–	–	3
Tubercular Adenitis	1	–	–	–	–	–	–	–	–	–	1
,, Meningitis	5	–	–	2	1	–	–	–	2	–	10
,, Peritonitis	–	–	–	1	–	–	–	–	–	–	1
Carried forward	98	35	28	29	9	8	3	4	17	6	237

PARISH LETTER:	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*K*	Tl.
Brought forward	98	35	28	29	9	8	3	4	17	6	237
Intemperance.											
Alcoholism	–	1	–	–	–	–	–	–	1	–	2
Parturition.											
Eclampsia	1	–	–	–	–	–	–	–	–	–	1
Puerpureal Fever	–	–	–	–	1	–	–	–	–	–	1
Septic.											
Erysipelas	1	–	–	–	–	–	–	–	–	–	1
Peritonitis	1	–	1	–	–	–	–	–	–	–	2
Pyæmia	1	–	–	–	–	–	–	–	–	–	1
Septicæmia	6	–	–	1	–	–	–	–	–	–	7
Tumour.											
Malignant	21	2	4	1	-	1	1	1	3	1	35
Violence.											
Drowning	3	1	2	–	–	1	1	–	–	1	9
Dynamite Explosion	–	–	1	–	–	–	–	–	–	–	1
Fall	3	1	2	–	1	–	–	–	–	–	7
Run Over	–	–	1	–	–	–	–	–	–	–	1
Scalding	1	–	–	–	–	–	–	–	–	–	1
DISEASES OF SPECIAL ORGANS.											
Alimentary.											
Appendicitis	4	–	1	–	–	–	–	–	–	–	5
Intestines	–	2	1	1	–	1	–	–	–	–	5
Liver	2	–	–	–	–	–	–	–	–	–	2
Obstruction of Bowels	–	1	–	1	–	–	–	–	–	–	2
Stomach	–	–	–	–	–	–	–	1	–	–	1
Circulatory.											
Aneurysm	2	–	1	–	–	–	–	–	–	–	3
Angina Pectoris	–	1	–	–	–	–	–	–	–	–	1
Apoplexy	15	–	2	4	1	1	2	–	3	1	29
Atheroma	6	1	–	–	–	–	–	–	–	–	7
Embolism	–	–	1	–	–	1	–	1	–	–	3
Gangrene	1	–	–	1	–	–	–	–	–	–	2
Heart Disease	25	10	5	5	2	–	–	6	3	–	56
Carried forward	191	55	50	43	14	13	7	13	27	9	422

PARISH LETTER:	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*K*	Tl
Brought forward	191	55	50	43	14	13	7	13	27	9	422
Nervous.											
Bulbar Paralysis	1	–	–	–	–	–	–	–	–		1
Dementia	2	–	–	–	–	–	–	–	–	–	2
Disseminated Sclerosis	–	1	–	–	–	–	–	–	–	–	1
Epilepsy	5	1	–	1	–	–	–	–	–	–	7
General Paralysis of Insane	–	–	–	2	–	–	–	1	–	–	3
Locomotor Ataxy	–	–	–	1	–	–	–	–	–	–	1
Meningitis	–	2	1	–	–	–	–	–	–	–	3
Myelitis	2	–	–	–	–	–	–	–	–	–	2
Paralysis	4	–	2	1	–	–	–	–	–	–	7
Paralysis Agitans	–	–	–	1	–	–	–	–	–	–	1
Tabes Dorsalis	–	–	–	1	–	–	–	–	1	–	2
Respiratory.											
Asthma	1	–	–	–	–	–	–	–	–	–	1
Bronchitis	12	4	–	1	2	–	1	3	3	–	26
Broncho-Pneumonia	3	–	3	1	1	–	–	–	–	–	8
Pleuro-Pneumonia	–	–	1	–	–	–	–	–	–	–	1
Pneumonia	7	3	1	–	–	–	–	–	1	1	13
Urinary.											
Cystitis	1	–	–	–	–	–	–	–	–	–	1
Diabetes	1	–	1	–	–	–	–	–	–	–	2
Nephritis	10	–	1	3	–	–	1	–	2	–	17
Totals	240	66	60	55	17	13	9	17	34	10	521
Still Births	30	11	5	6	1	2	–	–	1	6	62

Table

(INCORP. SOC.

Names of Parishes.	ST PETER-PORT.				ST. SAMPSON'S.				THE VALE.				CASTEL.				ST. SAVIOUR'S.			
YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
Column ...	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1899.........	17914	469	298	47	5317	177	90	30	4768	166	72	28	2717	71	62	11	1027	24	19	6
1900........	18044	436	302	65	5452	178	62	19	4921	170	82	25	2761	70	64	11	1045	30	17	4
1901.........	18162	440	303	66	5573	166	95	31	5082	167	101	45	2802	69	64	11	1062	27	14	3
1902	18240	459	302	60	5622	175	83	25	5133	168	77	28	2812	65	60	10	1067	27	16	2
1903.........	18464	421	264	38	5681	200	85	26	5196	173	72	25	2846	87	55	6	1080	26	15	1
1904.........	18760	461	321	77	5773	165	87	37	5280	164	71	26	2890	104	46	9	1097	29	30	4
1905.........	18996	461	302	59	5844	180	77	17	5344	173	72	21	2914	90	62	16	1109	29	12	1
1906.........	19232	427	268	54	5915	174	64	29	5408	145	69	21	2938	93	64	12	1121	32	18	7
1907.........	19364	392	275	44	5995	160	75	26	5481	146	68	14	2960	77	74	12	1133	30	15	1
1908.........	19622	366	257	44	6050	163	93	34	5531	144	57	16	3012	88	70	10	1141	38	14	3
Average of 10 years to 1908.	18679	413	289	55	5722	173	81	27	5214	161	74	24	2865	81	62	10	1088	29	17	3
1909	19780	383	240	36	6108	175	66	22	5580	137	60	16	3032	78	55	9	1150	27	17	7

III
OF M. O. H., 1900.)

Names of Parishes.	ST. PETER-IN-THE-WOOD.				TORTEVAL.				FOREST.				ST. MARTIN'S.				ST. ANDREW'S.			
YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths registered.	Deaths under 1 year.
Column ...	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1899.........	1516	50	32	10	446	6	9	1	800	22	19	6	3073	89	45	6	1494	47	20	6
1890.........	1548	57	25	9	446	19	8	2	822	23	19	4	3140	100	39	6	1524	38	17	2
1901.........	1577	57	23	8	446	6	6	2	842	27	20	7	3201	88	46	10	1552	49	27	6
1902.........	1587	53	31	11	447	14	12	4	851	30	13	4	3226	93	43	14	1564	44	20	3
1903.........	1619	56	16	4	453	8	12	1	862	22	13	3	3265	90	38	4	1584	37	27	4
1904.........	1646	52	35	8	461	10	6	0	877	27	20	5	3317	91	51	10	1609	41	23	5
1905.........	1672	56	29	4	467	22	10	0	889	19	15	0	3351	86	43	10	1634	40	22	7
1906..... ...	1698	60	25	9	473	6	9	2	901	26	15	6	3385	107	45	13	1659	42	11	1
1907.........	1741	60	16	8	481	20	6	1	917	32	17	5	3445	97	39	8	1689	54	21	4
1908.........	1759	44	29	8	488	14	4	2	931	27	11	4	3485	78	38	8	1711	43	18	2
Average of 10 years to 1908.	1636	54	26	7	460	12	8	1	869	25	16	4	3288	91	42	8	1612	43	20	4
1909.........	1774	41	13	6	492	14	9	1	945	38	17	3	3532	79	34	6	1752	41	10	5

Table IV.

CAUSE OF, AND AGES AT DEATH, OF THE DEATHS REGISTERED DURING THE YEAR 1909.

CAUSE OF DEATH.	WHOLE ISLAND.						
	All Ages.	Under 1.	1-5.	6-15.	16-25.	26-65.	66 and upw'ds.
General Diseases and Injuries.							
Diseases of the Blood.							
Anæmia	1	—	—	—	—	1	—
Hæmophilia	1	—	—	—	—	1	—
Leucocythœmia	1	—	—	—	1	—	—
Pernicious Anæmia	2	—	—	—	—	2	—
Ricketts	4	3	1	—	—	—	—
Epidemic.							
Diphtheria	2	—	2	—	—	—	—
Enteric Fever	1	—	—	—	1	—	—
Enteritis	10	9	—	1	—	—	—
Influenza	9	—	—	—	—	4	5
Scarlet Fever	2	—	1	1	—	—	—
Whooping Cough	1	1	—	—	—	—	—
Infancy and Old Age.							
Congenital Malformation	3	3	—	—	—	—	—
Convulsions	11	9	1	1	—	—	—
Debility at Birth	7	7	—	—	—	—	—
Marasmus	28	26	2	—	—	—	—
Premature Birth	28	28	—	—	—	—	—
Senile Decay	70	—	—	—	—	—	70
Infective.							
General Tuberculosis	7	2	3	1	—	1	—
Phthisis	34	1	—	2	12	18	1
Tabes Mesenterica	3	3	—	—	—	—	—
Tubercular Adenitis	1	—	—	1	—	—	-
„ Meningitis	10	2	4	3	1	—	—
„ Peritonitis	1	—	—	—	1	—	—
Carried forward	237	94	14	10	16	27	76

CAUSE OF DEATH.	WHOLE ISLAND.						
	All Ages.	Under 1.	1-5.	6-15.	16-25.	26-65.	66 and upw'ds.
Brought forward	237	94	14	10	16	27	76
Intemperance.							
Alcoholism	2	—	—	—	—	2	—
Parturition.							
Eclampsia	1	—	—	—	—	1	—
Puerpureal Fever	1	—	—	—	—	1	—
Septic.							
Erysipelas	1	—	—	—	—	—	1
Peritonitis	2	—	—	1	1	—	—
Pyæmia	1	1	—	—	—	—	—
Septicæmia	7	—	—	—	1	4	2
Tumour.							
Malignant	35	—	—	1	—	15	19
Violence.							
Drowning	9	—	—	1	1	6	1
Dynamite Explosion	1	—	—	—	—	1	—
Fall	7	—	1	—	3	2	1
Run Over	1	—	1	—	—	—	—
Scalding	1	—	1	—	—	—	—
DISEASES OF SPECIAL ORGANS.							
Alimentary.							
Appendicitis	5	—	1	1	1	2	—
Intestines	5	2	—	—	—	1	2
Liver	2	1	—	—	—	1	—
Obstruction of Bowels	2	—	—	—	1	—	1
Stomach	1	—	1	—	—	—	—
Circulatory.							
Aneurysm	3	—	—	—	—	3	—
Angina Pectoris	1	—	—	—	—	—	1
Apoplexy	29	—	—	—	—	6	23
Carried forward	354	98	19	14	24	72	127

CAUSE OF DEATH.	WHOLE ISLAND.						
	All Ages.	Under 1.	1-5.	6-15.	16-25.	26-65.	66 and upw'ds.
Brought forward	354	98	19	14	24	72	127
Atheroma	7	—	—	—	—	1	6
Embolism	3	—	—	—	1	—	2
Gangrene	2	—	—	—	—	1	1
Heart Disease	56	—	—	—	3	25	28
Nervous.							
Bulbar Paralysis	1	—	—	—	—	1	—
Dementia	2	—	—	—	—	2	—
Disseminated Sclerosis	1	—	—	—	—	1	—
Epilepsy	7	—	—	1	—	4	2
General Paralysis of Insane	3	—	—	—	—	3	—
Locomotor Ataxy	1	—	—	—	—	1	—
Meningitis	3	2	—	—	—	1	—
Myelitis	2	—	—	—	—	1	1
Paralysis	7	—	—	—	—	4	3
Paralysis Agitans	1	—	—	—	—	—	1
Tabes Dorsalis	2	—	—	—	—	2	—
Respiratory.							
Asthma	1	—	—	—	—	1	—
Bronchitis	26	6	3	2	—	2	13
Broncho-Pneumonia	8	3	4	—	—	—	1
Pleuro-Pneumonia	1	—	—	—	—	1	—
Pneumonia	13	2	2	—	—	4	5
Urinary.							
Cystitis	1	—	—	—	—	—	1
Diabetes	2	—	—	—	—	2	—
Nephritis	17	—	—	1	2	9	5
Totals	521	111	28	18	30	138	196

66 to 80, 22; 81 to 90, 43; 91 to 100, 5; Over 100, 0.

MARRIAGES.

The number of marriages during the year was 308, equal to a rate of 13·9 per 1,000 persons.

Of these 191 took place in Church of England Churches, 21 in Roman Catholic, and 42 in Noncomformist Churches, and 54 at the Greffe Office.

The average number for the five preceding years was 294.

DIPHTHERIA.

There were 37 cases of Diphtheria notified, only four of which were isolated at home. There were two deaths at the Sanatorium. Half the cases occurred during the last three months of the year, as is the usual incidence.

Twenty-six of the cases were in the Town Parish, and only 11 in the country, a reversal of the usual experience.

Two cases contracted the disease from a puppy, the discharge from its nose shewing the Bacilli of the disease, and another case was due to a sick cat. As domestic animals often suffer from this disease, and children naturally nurse them especially when sick, parents should take great care that any such animal when ill should be kept away from children, if it be not destroyed.

In two instances three members of a family were affected, and one patient arrived in the island ill with the disease.

The other cases call for no special comment.

Table V.

DIPHTHERIA FOR 1909.

Parishes.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.
St. Peter-Port	2	4	1	–	2	–	2	1	1	4	6	3	26
St. Sampson's	–	1	–	–	2	–	–	–	–	–	–	–	3
Vale	–	1	–	–	–	–	–	–	–	–	–	–	1
Castel	–	–	–	–	–	–	–	–	–	4	–	1	5
St. Saviour's	–	–	–	–	–	–	–	–	–	–	–	–	0
St. Peter-in-the-Wood	–	–	–	–	–	–	–	–	–	–	–	–	0
Torteval	–	–	–	–	–	–	–	–	–	–	–	–	0
Forest	–	1	–	–	–	–	–	–	–	–	–	–	1
St. Martin's	–	–	–	–	–	–	1	–	–	–	–	–	1
St. Andrew's	–	–	–	–	–	–	–	–	–	–	–	–	0
Total	2	7	1	0	4	0	3	1	1	8	6	4	37
Deaths in Town	–	–	–	–	–	–	–	–	–	–	–	–	0
„ Country	–	1	–	–	–	–	–	–	–	1	–	–	2

SCARLET FEVER.

Twenty-nine cases only were notified in 1909. In the second half of the year the disease reverted to the mild type in which it usually occurs in Guernsey but two deaths occurred in the first part of the year, one at home, and one at the Sanatorium admitted during 1908.

The mildness of this disease during recent years has caused it to be lightly regarded, but past experience shews that the type may quickly change from a mild to a severe one. I am quoting from a recognised authority on the subject in the current number of the *Lancet.* " At a certain time or in a certain place Scarlet Fever may be a very mild disease, but at any time or place it may again become virulent, and everyone who has seen malignant Scarlet Fever. will agree that it is a most terrible disease. I shudder when I think of cases I have seen and hope I may never meet with another."

No cases were due to milk infection as far as I could judge. I think this disease is often due to the purchase of ready-made clothing, which is manufactured not in a factory, but in wretched and insanitary homes in the slums of large towns.

Table VI.

SCARLET FEVER FOR 1909.

Parishes.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.
St. Peter-Port	–	4	–	–	1	–	3	2	–	3	1	–	14
St. Sampson's	–	2	1	1	–	–	–	–	–	–	–	–	4
Vale	–	3	1	–	1	–	–	–	–	–	–	–	5
Castel	1	–	–	–	1	–	–	–	–	–	–	–	2
St. Saviour's	–	–	–	–	–	–	–	–	–	–	–	–	0
St. Peter-in-the-Wood	–	–	–	–	–	–	–	–	–	–	–	–	0
Torteval	–	–	–	–	–	–	–	–	–	–	–	–	0
Forest	–	–	–	–	–	–	–	–	–	–	–	–	0
St. Martin's	–	–	–	1	–	–	–	1	–	–	1	–	3
St. Andrew's	–	–	–	–	–	–	–	–	–	–	–	–	0
Doubtful	–	–	–	–	–	–	1	–	–	–	–	–	1
Total	1	9	2	2	3	0	4	3	0	3	2	0	29
Deaths in Town	–	–	–	–	–	–	–	–	–	–	–	–	0
„ Country	1	–	–	–	1	–	–	–	–	–	–	–	2

ENTERIC FEVER.

Nine cases of this disease were notified, and one doubtful case removed from the camp, which subsequently proved to be Influenza.

All were isolated at the Sanatorium and one death occurred. The first case was in March, a sailor on a local steamer who became infected in St. Malo. The next two cases were in June, the patients coming from a village in Cambridgeshire.

Of this family, a widow and four daughters, the mother and one child sickened on the journey here; one daughter was admitted to a local hospital and another travelled to London and was there taken ill, after the mother left. Of the family, therefore, only one child escaped contracting enteric fever.

Two cases were removed from St. Sampson's parish in October, but were not connected with each other.

The history of the remaining four cases is fortunately a very unusual one, The father of the family died in the latter part of October from an illness which was probably Enteric Fever, but which was not recognised as such. On November 8th, a son was removed from another house to which he had gone and on a visit to his home being paid, another son was found ill and also removed. A third son was notified four days afterwards, and although several subsequent visits to the house were paid, the existence of any further illness was denied. On the 30th November a fourth son who had left home a day before was notified. He had been ill for at least a month and was in a hopeless condition, dying a few days afterwards. An inquest was held in this case, and it revealed the remarkable fact that the five cases of illness in this family were attributed not to an infectious disorder, but to witchcraft.

All the cases of Enteric originating in the island were drinking foul and grossly contaminated well waters.

In one instance Waterworks water was laid on to the premises, but had not been used; in the other two instances the wells were ordered to be disused, but I question whether the only other available supplies in the neighbourhood were in a much better condition, although not specifically contaminated.

As a result of a severe outbreak of Enteric Fever at St. Brieuc due primarily to the consumption of infected oysters, the Royal Court, at the instance of the Board of Health, passed an Ordinance forbidding the importation of oysters and molluscs from France. This Ordinance will, I trust, be made a permanent one. as suggested in my last annual report.

Table VII.

ENTERIC FEVER FOR 1909.

Parishes.	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tl.
St. Peter-Port	–	–	1	–	–	–	–	–	–	–	–	–	1
St. Sampson's	–	–	–	–	–	–	–	–	–	1	1	–	2
Vale	–	–	–	–	–	–	–	–	–	1	3	–	4
Castel	–	–	–	–	–	–	–	–	–	–	–	–	0
St. Saviour's	–	–	–	–	–	1	1	–	–	–	–	–	2
St. Peter-in-the-Wood	–	–	–	–	–	–	–	–	–	–	–	–	0
Torteval	–	–	–	–	–	–	–	–	–	–	–	–	0
Forest	–	–	–	–	–	–	–	–	–	–	–	–	0
St. Martin's	–	–	–	–	–	–	–	–	–	–	–	–	0
St. Andrew's	–	–	–	–	–	–	–	–	–	–	–	–	0
Doubtful	–	–	–	–	–	–	–	–	1	–	–	–	1
Total	0	0	1	0	0	1	1	0	1	2	4	0	10
Deaths in Town	–	–	–	–	–	–	–	–	–	–	–	–	0
„ Country	–	–	–	–	–	–	–	–	–	–	–	1	1

KING EDWARD SANATORIUM.

At the end of 1908 there were 45 patients in this Institution, and 67 were admitted during the year.

This number compares very favourably with the average yearly total since the opening of the Sanatorium, which is 140.

Seven patients remained at the end of 1909. The daily average of patients was 8, and Staff 10. The average duration of patients' stay in the Sanatorium was 26·1 days, but this low figure was due to the large number remaining from the previous year.

One nurse contracted Diphtheria, and in the last two months of the year the staff suffered from Influenza of severe type.

The greatly diminished death rate of the past few years, especially in the earlier periods of life, must as our statistics shew in great measure be due to thesaving of life through the treatment of infectious diseases at the Sanatorium, instead of in the patients' homes.

The receipts from Paying Patients were only £6 12s. 0d., £4 was received from the sale of Vaccine and Antitoxin, and £22 18s. 6d. for Disinfection, including that of cowsheds and the Public Markets.

Table VIII.

CASES TREATED AT THE SANATORIUM AND AT HOME, 1909.

	St Peter-Port.	St. Sampson's.	Vale.	Castel.	St. Saviour's.	St. Peter-in-the-Wood.	Torteval.	Forest.	St. Martin's.	St. Andrew's.	Totals.
DIPHTHERIA—											
At the Sanatorium	25	3	1	2	–	–	–	1	1	–	33
At Home	1	–	–	3	–	–	–	–	–	–	4
Doubtful	–	–	–	–	–	–	–	–	–	–	0
Total	26	3	1	5	0	0	0	1	1	0	37
SCARLET FEVER—											
At the Sanatorium	12	4	5	1	–	–	–	–	3	–	25
At Home	2	–	–	1	–	–	–	–	–	–	3
Doubtful	1	–	–	–	–	–	–	–	–	–	1
Total	15	4	5	2	0	0	0	0	3	0	29
ENTERIC FEVER—											
At the Sanatorium	1	2	4	0	2	–	–	–	–	–	9
At Home	–	–	–	–	–	–	–	–	–	–	0
Doubtful	–	–	–	1	–	–	–	–	–	–	1
Total	1	2	4	1	2	0	0	0	0	0	10

Table IX.

CLASSIFIED ACCORDING TO AGES, 1909.

	0-1	1-5	5-10	10-15	15-20	20-25	25-30	30 & over.	Tl.
DIPHTHERIA	–	6	8	6	5	3	5	4	37
Doubtful	–	–	–	–	–	–	–	–	0
Total	0	6	8	6	5	3	5	4	37
SCARLET FEVER	–	5	16	7	–	–	–	–	28
Doubtful	–	–	–	1	–	–	–	–	1
Total	0	5	16	8	0	0	0	0	29
ENTERIC FEVER	–	1	1	1	3	1	1	1	9
Doubtful	–	–	–	–	–	1	–	–	1
Total	0	1	1	1	3	2	1	1	10
								Grand Total	76

TUBERCULOSIS.

The number of deaths due to this cause was 56, of which 34 were due to Pulmonary Phthisis, being a rate of ·07 per 1,000 persons living.

From 1900-04 the average number of deaths from Tuberculosis and Phthisis were respectively 83 and 59; from 1905-09 57·8 and 40·8.

There is thus a marked decline in their mortality.

The Board of Health, after much consideration, were unanimously of opinion that notification of cases of Phthisis, to be of service must be extended to cover all classes of patients suffering from the disease.

An Ordinance was drawn up early in 1909, but unfortunately it only provided for the notification of pauper patients, thus following the Act compulsory throughout England, not the Acts in force at the discretion of the local authorities in so many districts.

I trust that in the near future the recommendations of the Board will be adopted instead of the existing Ordinance, as under it only 16 notifications have been made in the year.

A large number of rooms—62—have been disinfected for Tuberculosis, and this disinfection is now enforced by Law.

I regard this disinfection as one of the most valuable and satisfactory operations of the Board.

A comprehensive scheme for the treatment of poorer people in Guernsey suffering from Phthisis is highly desirable, and I hope to submit one in my next report.

The Ordinance relating to Bovine Tuberculosis has been modified during the year, and the States have granted compensation to the owners of cattle slaughtered by reason of this disease, such compensation to be also retrospective.

The formation of a Mutual Insurance Company for the same purpose has also been effected. The local opposition to the Tuberculin testing of cattle has therefore greatly diminished and the erroneous idea that such testing caused Tuberculosis seems to have died out.

The year has established a record as regards the export of Guernsey cattle, viz., 756, of which number 703 were sent to the United States of America. Of this number only 4 "reacted." As no cattle from here could be imported into the United States without having first successfully passed the Tuberculin test, it was evident to persons opposed to such testing that their new owners would not thus subject them to the risk of contracting tuberculosis, if there were the slightest chance of their doing so.

Nineteen cattle have been slaughtered during the year, by order of the Supervisor, having been found to be Tuberculous.

In every instance the remaining animals of the herd and contacts have been tested by the States Veterinary Surgeon. Fourteen cow-sheds were disinfected by reason of these outbreaks. The result of the year's legislation ought to make possible the extinction of Bovine Tuberculosis in Guernsey at an early date.

COWSHEDS AND DAIRIES.

Many sittings of the Royal Court have been occupied with the consideration of a law dealing with this subject. The general principles were agreed to and drafted in proper form, but were not submitted in the form of an Ordinance.

Two posters. one dealing with Cowsheds, and the other with Dairies, giving hints as to the improvements suggested in unsuitable farms · have been extensively circulated.

A hundred and sixty-eight visits have been paid during the year, and in the majority of cases efforts to improve the condition of the buildings in some way or other were apparent. In only a few cases had whitewashing the sheds been neglected.

It is often difficult to find the farmers at home, and in their absence a responsible person is not always at hand or willing to show the farm buildings.

Nine certificates have been granted to the owners of farms and dairies whose premises were in an exceptionally satisfactory condition.

I have consulted Mr. G. W. Foote, whose local experience of farms is probably unequalled, with regard to his views about the condition of the farms generally, and he replied as follows, kindly allowing me to publish his answer: "There has been an enormous improvement in the condition of cowsheds in the Island since I first started in practice 33 years ago, and during the last 18 months this improvement has been most marked.

"I am convinced that the farmers and breeders are doing their best to meet the requirements of the authorities."

WATER SUPPLY.

It was confidently hoped that the settlement of this most important question would be one of the achievements of the year 1909.

The exhaustive report of the States Water Committee, the result of years of constant and patient work, was presented to the States on the 17th March.

As the purchase of the Waterworks undertaking had seen previously thrown out by the States, a new Concession in favour of the Water Company was then submitted to them and rejected.

On May 17th, the questions of the purchase of the undertaking and of the new Concession were again brought forward and rejected. On October 6th the Concession, but not the question of purchase, was again considered and rejected. After a final submission to the States on November 3rd, as the previous rejection had not been carried by a two-thirds majority, it was again negatived by a majority of more than the required two-thirds.

Matters had thus reached a deadlock, and it is difficult to see how the question can be re-opened.

Both Mr. Beresford and Mr. Eaton, the Consulting Engineers of the States and the Water Company respectively, agreed that the water required for the public needs could not in Guernsey be obtained from an extension of the well system.

From its geological formation it was impossible to bore through impervious strata, and thus tap underground sources of supply by artesian wells. The sinking of more wells had generally resulted in drying or reducing the yield of water from neighbouring ones.

Both the Engineers agreed that the use of stream water, and preferably that of the King's Mills stream with the special precautions usual in such supplies, was the only practical solution of the difficulty. Both were in favour of sand filtration, but Mr. Beresford desired in addition the provision of a storage reservoir of very large capacity.

In Mr. Eaton's report, provision for storage was practically absent, as he relied upon drawing from the existing wells to supplement the stream water.

Mr. Guilbert, the States Surveyor, presented three plans for reservoirs of more moderate, but of various sizes and on different sites. His suggestions found favour in many quarters, and seemed practical and sufficient. After much discussion, in which the quantity of water to be supplied to growers was the subject of great diversities of opinion, the States rejected the Clause relating to the use of stream water, and the Concession was thus rendered ineffective.

Many members favoured a dual system of supply, the existing wells to be used for domestic purposes only, whilst quarry and stream water was to be supplied for the growers' needs. The water available from wells, however, would not suffice for the purpose suggested, and the financial difficulties and dangers attending upon a dual system were so great as to render such a proposal an impossible one in practice.

The growers meanwhile, perhaps actuated by philanthropic motives, perhaps alarmed by the excessive shortness of their supply, and influenced by the fact that rain water was best for their crops, had been constructing cisterns in which to store the rain water.

They were thus following the advice of Sir Henry Giffard, whose suggestion was that no grower should receive water from the Companies' mains who had not made provision for the storage of rain water falling upon his glass houses.

Such a plan would, if generally adopted, have resulted in a great decrease in the water supplied for trade, which in Guernsey means practically growers' purposes.

The year 1908 was an exceptionally dry one, the shortage of rainfall amounting to 10 inches, and the first five months of 1909 were, with the exception of March, decidedly dry ones.

Quite early in the summer the shortage of water became evident and the need for a supplementary supply if one could be obtained, became urgent.

The use of stream water being forbidden by the Order in Council, the only alternative seem to be the use for domestic purposes of quarry water, which would be a mixture of spring and rain water.

To be quickly available at an expense agreeable to the Water Company, to be near the existing mains, to be suitable for drinking purposes after filtration, these were some of the conditions to which the proposed water supply would have to conform.

The use of sand filters was out of the question owing to considerations of time and expense, so a substitute for them had to be found, and finally it was necessary to secure a quarry which had been long disused, in order that the water might have been purified by prolonged sedimentation.

The disused Vale Mill quarry best fulfilled these conditions and the compressed air and oxidising filter of the Candy Co. was selected for use there. The amount of water available was estimated to be from 8,000,000 to 10,000,000 gallons.

My scheme was agreed to by the Water Co. and approved by the States on May 17th.

Various delays in its execution occurred, and when the filter was fixed it was found that the high working pressure had dissolved off the preservative coating in the new mains, which before being laid had been lying exposed to the heat of the sun.

It was therefore found necessary to pump water through the filter back into the quarry, until the taste of tar had disappeared. Another difficulty then arose as owing to corrosion and deposit in the older mains, which were small ones, friction was so great that only a small quantity of water could be passed through them, and a new main was therefore laid by the Company to St. Sampson's Harbour with all speed.

This main so improved the supply, that in September the water was delivered throughout St. Sampson's, parts of the Vale, and the Town Parish as far as the Salerie.

The working of the filter exceeded our expectations, and it delivered a pure and highly ærated water.

Up to the end of the year about 3,000,000 gallons had been supplied from the quarry, and its use is still being continued.

So much discussion and newspaper correspondence on this subject has taken place during the year, that a short summary of the position will be sufficient in this report.

Two main objections to the King's Mills scheme were, the question of water rights, and a widely accepted idea that stream water could not be rendered safe for drinking purposes.

In the days when steam and electric power were not, the power derived from water wheels must have been a most valuable asset and the rights connected with it zealously safeguarded.

At the present time, however, the value of such power must be small, and an equitable indeed liberal settlement, of such claims an easy matter.

In Guernsey most of the wells are shallow ones admitting surface water freely as they are usually dry steened. It is difficult to make people appreciate that a dangerously contaminated water may often be clear, sparkling and palatable, and that in wells fed by water which soaks through a soil polluted with organic matter, the water has not the power of purifying itself such as streams have by oxidisation, exposure to sunlight, movement, &c.

In Guernsey the Company have I believe six wells, each of course with its own pump.

From April 4th to August 3rd, 1908, an average daily quantity of 230,000 gallons was pumped from them. Not only is this entirely inadequate amount of water for the needs of the Island, but it is the most expensive method of supplying water.

During the years 1904-07 the average quantity of water entering the King's Mills Pond was 880,000 gallons daily.

I need only refer to the fact that 60°/o of the water supplied to London is drawn from the River Thames, the intakes being in the neighbourhood of Thames Ditton and Surbiton, and that such water is polluted by the drainage of fields, as well as by the sewage treated and untreated, of towns and villages with a population of over 200,000 people, but the dilution of sewage by the river water is of course enormous.

By efficient filtration and storage in reservoirs, this water is so purified that London is the healthiest large town in the world in spite of its slums, and enormous area so densely packed with people.

This is effected by no secret processes, and what can be accomplished in London can also be carried out on a small scale in Guernsey.

If necessary, parts of the King's Mills stream could be conveyed through pipes, and the authority answerable for its purity would have ample powers to prevent contamination from farm buildings and the like.

I will now briefly state what I consider the absolute essentials for the use of the King's Mills stream as a domestic supply. A storage reservoir, not only for purposes for accumulating water when the yield is at the maximum and the demand at the minimum, but also for the purification of the water by sedimentation. A system of filtration of the greatest efficiency, a constant, not an intermittent supply, and the prohibition of the dangerous and insanitary storage cisterns in houses; which are useless with a constant supply.

The danger of coal gas or filth being sucked into defective mains with an intermittent supply is well known.

When water mains, fitted with hydrants intended for a constant supply, are used for an intermittent one, the floating hollow ball, which by its contact with the valve seat should prevent leakage, drops.

Under these conditions washings from the roads can enter the mains and have in the past done so here.

I would substitute for sand filters the filters in use at the Vale Quarry, as the cost of them is about one-third of the former; they occupy less space, can be placed on a rising main, give as good, if not better results, and above all are free from the dangers, disadvantages, and waste of water attending the periodical cleansing required by sand filters.

In my report for 1903 I wrote as follows :—

"In very many instances water has to be carried for considerable distances and perhaps up two or three flights of stairs.

"This is particularly so in the Town Parish, where large and lofty houses at one time occupied by well-to-do families are now, owing to the large increase of population, let out in tenements.

"The 'drawers of water' are too often delicate women or children of tender age, to whom the task of pumping and carrying the water is beyond their strength.

"It is no wonder then that the minimum amount of water is made to suffice for domestic and washing purposes, and that little is available for the flushing of closets and drains.

"To put it shortly, every house should be provided with an adequate water supply, and if this be not provided by private enterprise, it is the duty of the proper authorities to place it within the reach of everyone, particularly the poorer and most needy classes."

The new Ordinance relating to the building of houses, just passed by the States, requires that every new house must be provided with an adequate water supply, but unfortunately it does not say how this condition can at present be made possible.

The low-lying parts of the north of the Island are always particularly badly off as regards water, as they derive their supply from shallow wells, many of them yielding water of doubtful purity.

During this year some of these wells have been found to be badly contaminated and the cause of illness; yet, unfortunately, there has been no water available in the place of them. To sink other wells in the same soil would be useless as a remedy. The only effectual one is to convey water by public supply from more favoured districts.

The abundant rainfall of January and February, 1910, must not cause us to forget that in the future we shall again be exposed to years of such shortage as prevailed in 1909 and previous years. The autumn rains did not help the situation and had it not been for the supply from the Vale Quarry, which will be no longer available after this year, it would have been impossible to supply water, even in small quantities, daily throughout the area fed by the Company's mains, but only in certain sections of it.

In the summer and autumn months many of the public wells ran dry, water for the flushing of drains and gullies, municipal and domestic purposes, was hardly obtainable, and the dangers from fire could scarcely be overestimated.

Judging by past statistics we may expect two or three years of heavy rainfall, and it behoves us therefore now to prepare for the inevitable dry years which must follow.

All sections of the community should therefore sink their differences and unite their energies to ensure that the Island shall be provided with an adequate water supply.

No question before us can be so vitally important as this one is; indeed, in it is bound up not only the prosperity, but questions of life and death to the inhabitants of Guernsey.

DISINFECTION.

The following are the details of this work during the year:—

Adults and Children's Clothing	2,415
Blankets, Counterpanes and Sheets	979
Bolsters and Pillows	546
Feather Beds	83
Floor Coverings	247
Mattresses	313
Sundry Articles	876
Rooms for Notifiable Disease	84
Rooms for Phthisis	62
Rooms for Non-notifiable Disease	18
Wards and Rooms at Sanatorium	14
Cow Sheds	14
Cubicle at Militia Huts	1
Boys' Intermediate School	1
Slaughter House	1
Fish Market	6
Houses and Cowsheds visited and re-visited	204
Samples of Water	22

During the past eight years the Board has only been called upon to pay the sum of £1 6s. 0d. for articles lost or damaged during disinfection.

Such a record shows how carefully, and the remarkable freedom from house re-infection shows how thoroughly this work has been carried out in the past. It reflects the greatest credit upon Mr. Le Brun and the staff who work under him.

SCHOOL INSPECTION.

It has only been necessary to disinfect one school during the year—the Intermediate School for Boys.

This was required owing to a small outbreak of Scarlet Fever. When visiting a Primary School for other purposes I have picked out children who were suffering from defective vision. These children, if the parents were unable to pay fees, or bear the expense of providing glasses, were kindly helped by the Royal Court through the De La Court Fund.

I should say that I made no attempt at any diagnosis beyond satisfying myself that these children had defective vision.

A troublesome complication in some of the Town Schools was Scabies or Itch. Although an attempt was made to deal with these unpleasant cases, it could hardly be successful without a law compelling parents to submit their children for treatment for this and similar affections.

A short Ordinance relating to cemeteries was passed by the Royal Court during the year, forbidding the opening of any new cemetery or graveyard without their consent, and also the burial of a corpse in any other place than a recognised cemetery.

The Ordinance forbidding juvenile smoking, seems in the opinion of those best qualified to judge, to have worked exceedingly well, which is perhaps more than was generally expected when it was passed.

The scarcity of water in the summer and autumn made it imperative to use sea water for watering the streets. Its use tends to make roads slippery, particularly hilly ones, and many complaints as to its use were made, but it was of course impossible to discontinue the use of it.

In such a hilly town as St. Peter-Port, the use of a steam water cart would save strain upon horses, and enable a much larger area to be watered in a given time. If fitted with a pump, it could be filled from douits or from the sea, without having to return to the tank when empty. Sea water could be used in level streets, and as far as possible fresh water for the hilly ones.

Such a cart would also be available for road making and the flushing of road gully traps.

Many of the gully traps require re-charging with water when the solid matters are removed, there being no separate debris and intercepting chambers, and large quantities of water are required for this purpose.

It is not surprising therefore that during the past year these gully traps were not always fully charged and thus soon began to give off offensive odours.

The efficient watering of streets is so important a matter, particularly in a windy place, that such a plan is well worthy of consideration.

Many of the Public Health laws in force in Guernsey were passed before the formation of the Board of Health, therefore sanitary administration continues in great measure to be still carried out by the Douzaines. I think the time has now arrived when the Board of Health should be invested with more powers and responsibilities.

The question of food adulteration is one to which I would especially refer. The great majority of traders are honest in their dealings, but a minority requires supervision to ensure that adulteration of food is not practised.

Samples for analysis require to be taken with certain formalities, and this could better be done by a central authority than by ten separate ones. At present I have the power to take such samples, but neither power nor funds to have them analysed except through the Constables.

I consider that watchfulness in this matter should not be spasmodic but continuous, so that the risk of detection may be so great that it will not pay anyone to practice adulteration. As the whole Island benefits in this way the cost of analysis should be borne by the States, and not by any particular parish.

There is no legal standard in Guernsey for milk and butter. As the English standard is so low that it would allow of extensive adulteration without detection, it is highly desirable that one should be adopted without delay.

I would again endeavour to bring to notice the terribly unsatisfactory state of our present water supply.

The Prince of Wales in opening a new reservoir for the Liverpool Corporation spoke of "that inestimable blessing, abundance of pure water." May the day soon come when Guernsey will possess this boon.

HY. DRAPER BISHOP,
Medical Officer of Health.